

THE STRUGGLE FOR EXISTENCE

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existed all over the globe. Its ultimate origin is unknown to us. It may have originated in different ways at different centers. The simplest instruments for making fire can be classified according to the mode of movement employed in them as drilling, plowing, and sawing instruments. The fire drills have also undergone very important development and improvement, so that they have become very complicated machines. The ingenuity and inventive skill which were required to make a fire drill which was driven by a bow were as great as the same powers when manifested by an Edison or a Bessemer.

134. Psychophysical traits of primitive men. All the artifacts were made and all the arts were produced by the concurrent efforts of men to serve their interests. We find that primitive men put patient effort and astonishing ingenuity into their tools. They also attained to great skill in the use of clumsy tools. It is true, in general, of primitive men that they shirk all prolonged effort or patient application, but they do use great patience and perseverance when they expect to accomplish something of great importance to their interests. The same is true if they expect to gratify their vanity. In hair dressing or tattooing they submit to very irksome restraint prolonged through a long time. Also in feather work, partly useful and partly ornamental, they assorted feathers piece by piece, and enlaced the feathers in the meshes of their hats and caps, or fastened them into scepters with pitch. They "could make houses, etc., with their axes only by long-continued industry."¹ South American Indians made tools for printing tattoo patterns on the body. They were blocks, on each

face of which a pattern was raised, perhaps a different one on each side.² It should be noticed what prodigious power a large body of men can put forth .when they all work at the same task and are greatly interested in it. They begin by the same process, but the process differentiates and improves in their hands. Each gains skill and dexterity. They learn from each other, and the product is multiplied.

135. Language. Language is a product of the folkways which illustrates their operation in a number of most important details.

¹ Martius, *Ethnog. Brasil.*, 405. ² Boggiani, / *Caduvei* ^ I, 168.